



**MINISTRY OF HEALTH**

**General Hospital (Teaching), Peradeniya.**

**Bidding Document  
Volume 2 of 2  
(Section II,III,IV,V & VII)**

**Procurement of Goods  
National Competitive Bidding**

**Purchase , Installation & Commissioning of Backup Server  
& Accessories**

**Contract No: THP/FT/20/2024**

**General Hospital (Teaching),  
Peradeniya.**

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# **SECTION II**

## **Bidding Data Sheet (BDS)**

## Bidding Data Sheet (BDS)

The following specific data for the goods to be procured shall complement, supplement, or amend the provisions in the Instructions to Bidders (ITB). Whenever there is a conflict, the provisions herein shall prevail over those in ITB.

<b><i>ITB Clause Reference</i></b>	<b>A. General</b>
<b><i>ITB 1.1</i></b>	The Purchaser is: <b>General Hospital (Teaching), Peradeniya.</b>
<b><i>ITB 1.1</i></b>	The name and identification number of the Contract are <b>Procurement of Purchase , Installation &amp; Commissioning of Backup Server &amp; Accessories THP/FT/20//2024</b>
<b><i>ITB 2.1</i></b>	The source of funding is: <b>GOSL</b>
<b><i>ITB 4.1</i></b>	a. If the estimate cost for the procurement exceeds the Rs. 5 million the bidder shall register at the Registrar of Public Contract Sri Lanka at the time of submission of bids (PCA 3)
<b>B. Contents of Bidding Documents</b>	
<b><i>ITB 7.1</i></b>	For <b><u>Clarification of bid purposes</u></b> only, the Purchaser's address is: Attention: <b>Director</b> Address: <b>General Hospital (Teaching), Peradeniya</b> Telephone: <b>081-2388001</b> Facsimile number: <b>081-2388371</b>
<b>C. Preparation of Bids</b>	
<b><i>ITB 11.1 (e)</i></b>	The Bidder shall submit the following documents with the bid. Failure to submit one or more of the following documents, bids will be treated as <b>non-responsive</b> : <b>1.</b> Bid Submission Form (Including all related Cost, i.e. Post warranty service charges, civil construction work, etc.) <b>2.</b> Bid Security <b>3.</b> Power of Attorney to the signatory <b>4.</b> Price Schedule – Goods <b>5.</b> Price Schedule - Maintenance (if applicable) <b>6.</b> Delivery schedule - Goods <b>7.</b> Manufacture's Authorization Letter <b>8.</b> Bidder's response to Technical Specification <b>9.</b> Detailed Pro-forma Invoice <b>10.</b> Post qualification data (Financial Report, Work Shop details of Test equipment & Technical staff.... Etc.)

	<p>11. Copy of Business Registration Certificate</p> <p>12. Certificate of Registration as an agent on behalf of the tender (PCA 3 form)</p>
<b>ITB 15.1</b>	<p>a. The bidder shall quote all prices of goods &amp; services in Sri Lankan Rupees.</p> <p>b. If the Insurance is required Bidder shall submit separate Insurance coverage from port of disembarkation to the handing over &amp; commissioning including inland transportation, storage...etc.</p>
<b>ITB 17.3</b>	<p>Period of time the Goods are expected to be functioning (for the purpose of spare parts): <b>05 years from the date of delivery</b></p>
<b>ITB 18.1 (b)</b>	<p>Warranty &amp; post warranty, after sales services are required</p>
<b>ITB 19.1</b>	<p>The bid shall be valid until. <b>91 days</b></p>
<b>ITB 20.1</b>	<p>Bid shall include a Bid Security issued by</p> <ol style="list-style-type: none"> <li>1. Bank operating in Sri Lanka;</li> <li>2. A Bank operating in another country but the guarantee "confirmed" by a bank operating in Sri Lanka;</li> <li>3. Construction Guarantee Fund;</li> <li>4. Insurance Agencies.</li> </ol>
<b>ITB 20.2</b>	<p>The amount of the Bid Security shall be <b>2%</b></p> <p>The validity period of the bid security shall be until <b>119 Days</b></p>
	<p><b>D. Submission and Opening of Bids</b></p>
<b>ITB 22.2 (c)</b>	<p>The inner and outer envelopes shall bear the following identification marks:  <b>Procurement of</b> Purchase , Installation &amp; Commissioning of Backup Server &amp; Accessories</p> <p><b>THP/FT/20/2024</b></p>

	<b>Closing at 10.30 AM on 11/12/2024</b>
<b>ITB 23.1</b>	<p>For bid submission purposes, the Purchaser’s address is:  Attention: <b>Chairman, Regional Procurement Committee.</b>  Address: <b>General Hospital (Teaching), Peradeniya.</b></p> <p style="text-align: center;">OR</p> <p>Bids may be deposited in the Tender Box available at the office of  <b>The Accountant,</b>  <b>General Hospital (Teaching),</b>  <b>Peradeniya</b></p> <p>The deadline for the submission of bids is:  <b>Date: 11/12/2024      Time: 10.30 AM</b></p>
<b>ITB 26.1</b>	<p>The bid opening shall take place at:  <b>Address:</b>  Office of <b>Director Office</b>  <b>General Hospital (Teaching),</b>  <b>Peradeniya.</b></p> <p><b>Date: 11/12/2024      Time: 10.30 AM</b></p>
	<b>E. Evaluation and Comparison of Bids</b>
<b>ITB 35.3 d</b>	<p><b>Delivery schedule</b></p> <p>The goods covered under this invitation are required to be delivered within an acceptable range of weeks specified in the Schedule of Requirement. No credit will be given to earlier deliveries and offering delivery beyond this range will be treated as non-responsive. Within this acceptable range, an adjustment per week, 0.5% of Bid value (total equipment cost), will be added to the bid price for evaluation of bids offering deliveries later than the earliest delivery period specified in the Schedule of Requirements.</p>

ITB 35.4 <sup>1</sup>	<p><b>Evaluation Criteria</b></p> <p>The following factors and methodology will be used for evaluation:</p> <ol style="list-style-type: none"> <li>a. Completeness of the Bidding Document</li> <li>b. Responsiveness of the bid as per ITB 11.1 E</li> <li>c. Technical Specification compliance.</li> <li>d. Bid Price (ITB 14 )</li> <li>e. Operational cost of the equipment</li> <li>f. Service &amp; Maintenance cost (if applicable) <i>NPV value (at a depreciation rate of 10%) – the cost should be in Sri Lankan Rupees.</i></li> <li>g. Past performance of the Product</li> <li>h. Post qualification</li> <li>i. Delivery schedule</li> </ol>
<b>ITB 35.5</b>	<p>Bidders are allowed to quote for one or more items separate set of document shall be furnished to each line item</p> <p>Evaluation is based on separate items.</p>
<b>ITB 37.2</b>	<p><b>Post qualification Requirements</b></p> <p>After determining the lowest-evaluated bid in accordance with ITB Sub-Clause 36.1, the Purchaser shall carry out the post qualification of the Bidder in accordance with ITB Clause 37, using only the requirements specified.</p> <p><b>(a) Experience and Technical Capacity</b></p> <p>The Bidder shall furnish documentary evidence to demonstrate that it meets</p> <ol style="list-style-type: none"> <li>1. Past performance of the similar Goods. (Past repair and maintenance records, average equipment downtime &amp; end-user’s comments will be considered)</li> </ol>

	<b>F. Other Requirements</b>
<b>ITB 42.2</b>	<ol style="list-style-type: none"> <li>a. If the contract value exceeds the Rs.5 million, the bidder shall register the contract at the Registrar of public contracts Sri Lanka and submit the registered contract within 7 days of the receipt of an award.</li> <li>b. The Bidder shall submit a plan of the installation room, certified by the hospital Director, if applicable</li> <li>c. The bidder shall submit a written consent that the conditions of Service &amp; Maintenance agreement shall not be changed and shall not request to change, after the pre agreed price of 05 years, if the agreement should be extended beyond the original 05 years period</li> </ol>

# **Section IV**

## **Bidding Forms**

### **Table of Forms**

Bid Submission Form

Price Schedule

Bid Guarantee

Manufacturer's Authorization



# Bid Submission Form

*[The Bidder shall fill in this Form in accordance with the instructions indicated No alterations to its format shall be permitted and no substitutions shall be accepted.]*

Date: *[insert date (as day, month and year) of Bid Submission]*

No.: *[insert number of bidding process]*

**THP/FT/20/2024**

To: **Director, General Hospital (Teaching), Peradeniya**

We, the undersigned, declare that:

- (a) We have examined and have no reservations to the Bidding Documents, including Addenda No.: *[insert the number and issuing date of each Addenda]*;
- (b) We offer to supply in conformity with the Bidding Documents and in accordance with the Delivery Schedules specified in the Schedule of Requirements the following Goods and Related Services **[of Laptop Computer**
- (c) The total price of our Bid without VAT, including any discounts offered is: *[insert*
- (d) *the total bid price in words and figures]*;
- (e) The total price of our Bid including VAT, and any discounts offered is: *[insert the total bid price in words and figures]*;
- (f) Our bid shall be valid for the period of time specified in ITB Sub-Clause 18.1, from the date fixed for the bid submission deadline in accordance with ITB Sub-Clause 23.1, and it shall remain binding upon us and may be accepted at any time before the expiration of that period;
- (g) If our bid is accepted, we commit to obtain a performance security in accordance with ITB Clause 43 and CC Clause 17 for the due performance of the Contract;
- (h) We have no conflict of interest in accordance with ITB Sub-Clause 4.3;
- (i) Our firm, its affiliates or subsidiaries—including any subcontractors or suppliers for any part of the contract—has not been declared blacklisted by the National Procurement Agency;
- (k) We understand that this bid, together with your written acceptance thereof included in your notification of award, shall constitute a binding contract between us, until a formal contract is prepared and executed.
- (l) We understand that you are not bound to accept the lowest evaluated bid or any other bid that you may receive.

Signed: *[insert signature of person whose name and capacity are shown]*

In the capacity of *[insert legal capacity of person signing the Bid Submission Form]*

Name: *[insert complete name of person signing the Bid Submission Form]*

Duly authorized to sign the bid for and on behalf of: *[insert complete name of Bidder]*

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ *[insert date of signing]*

# Price Schedule

1. The Bidder shall fill in the Price Schedule in accordance with the instructions indicated. The list of line items in column 1 of the **Price Schedules** shall coincide with the list of Goods and Related Services specified by the Purchaser on the Schedule of Requirements.
2. If so specified in the Bid Data Sheet and in the Schedule of Requirement Bidder shall indicate the relevant post warranty service to be incurred by the Purchaser for successive Ten years.
3. Consumable parts to be excluded from the maintenance contract shall be given separately with their unit cost valid for a period of three years.
4. The costs quoted for the maintenance contract shall be binding upon the Bidder, which will form a basis for a service and maintenance agreement in case the Bidder is selected to perform the contract.



## Bid Guarantee

[This Bank Guarantee form shall be filled in accordance with the instructions indicated in brackets]

----- [insert issuing agency's name, and address of issuing branch or office] ----

--

**Beneficiary:** **Director, General Hospital (Teaching), Peradeniya.**

**Date:** ----- [insert (by issuing agency) date]

**BID GUARANTEE No.:** ----- [insert (by issuing agency) number]

We have been informed that ----- [insert (by issuing agency) name of the Bidder; if a joint venture, list complete legal names of partners] (hereinafter called "the Bidder") has submitted to you its bid dated ----- [insert (by issuing agency) date] (hereinafter called "the Bid") for the supply of [insert name of Supplier] under Invitation for Bids No. ----- [insert IFB number] ("the IFB").

Furthermore, we understand that, according to your conditions, Bids must be supported by a Bid Guarantee.

At the request of the Bidder, we ----- [insert name of issuing agency] hereby irrevocably undertake to pay you any sum or sums not exceeding in total an amount of - ----- [insert amount in figures] ----- (insert amount in words) upon receipt by us of your first demand in writing accompanied by a written statement stating that the Bidder is in breach of its obligation(s) under the bid conditions, because the Bidder:

- (a) Has withdrawn its Bid during the period of bid validity specified; or
- (b) Does not accept the correction of errors in accordance with the Instructions to Bidders (hereinafter "the ITB"); or
- (c) having been notified of the acceptance of its Bid by the Purchaser during the period of bid validity, (i) fails or refuses to execute the Contract Form, if required, or (ii) fails or refuses to furnish the Performance Security, in accordance with the ITB.

This Guarantee shall expire: (a) if the Bidder is the successful bidder, upon our receipt of copies of the Contract signed by the Bidder and of the Performance Security issued to you by the Bidder; or (b) if the Bidder is not the successful bidder, upon the earlier of (i) our receipt of a copy of your notification to the Bidder that the Bidder was unsuccessful, otherwise it will remain in force up to ----- (insert date)

Consequently, any demand for payment under this Guarantee must be received by us at the office on or before that date.

\_\_\_\_\_  
[Signature(s) of authorized representative(s) ]

# Manufacturer's Authorization

*[The Bidder shall require the Manufacturer to fill in this Form in accordance with the instructions indicated. This letter of authorization should be on the letterhead of the Manufacturer and should be signed by a person with the proper authority to sign documents that are binding on the Manufacturer. The Bidder shall include it in its bid, if so indicated in the BDS.]*

Date: *[insert date (as day, month and year) of Bid Submission]*

No.: *[insert number of bidding process]*

**THP/FT/20/2024**

To: *[insert complete name of Purchaser]*

**Director, General Hospital (Teaching) Peradeniya**

WHEREAS

We *[insert complete name of Manufacturer]*, who are official manufacturers of *[insert type of goods manufactured]*, having factories at *[insert full address of Manufacturer's factories]*, do hereby authorize *[insert complete name of Bidder]* who is currently our sole agent in Sri Lanka to submit a bid the purpose of which is to provide the following Goods, manufactured by us *[insert name and or brief description of the goods]* and to subsequently negotiate and sign the Contract.

In the event that the sole agency is changed to a different company we will ensure that all contractual obligations entered into between the Purchaser and the Bidder (sole agent) including warranty and post warranty maintenance (if required by the Purchaser), provision of spare parts etc. within the contract period will be fulfilled by the new agent.

We also confirm that spare parts, accessories and consumables will be freely available for the model/models offered for a period of at least s10 years after the warranty period.

We hereby extend our full guarantee and warranty in accordance with Clause 27 of the Conditions of Contract, with respect to the Goods offered by the above firm.

Signed: *[insert signature(s) of authorized representative(s) of the Manufacturer]*

Name: *[insert complete name(s) of authorized representative(s) of the Manufacturer]*

Title: *[insert title]*

Duly authorized to sign this Authorization on behalf of: *[insert complete name of Bidder]*

Dated on \_\_\_\_\_ day of \_\_\_\_\_, \_\_\_\_\_ *[insert date of*

*signing]*

# **Section V**

## **Schedule of Requirements**

1. List of Goods, Related Services & Delivery Schedule
2. Technical Specifications

### List of Goods, Related Services & Delivery Schedule

Item No.	Description of Goods	Qty.	Final Destination as specified in BDS	Required Delivery Period <sup>1</sup>	Bidder's Offered Delivery Period <sup>2</sup>
1	Supply, Installation & Commissioning of Backup Server & Accessories	01	TH Peradeniya	2 Weeks	

1. No. of weeks from the date of effectiveness of the contract / effective period will be counted from the date of signing the contract
2. Bidder shall offer the delivery period in weeks. The latest delivery date offered by the bidder will be considered as the delivery period (ITB 35.3 d) The latest delivery date will be considered on the date of delivery of the complete order without any shortages as mentioned in the Pro-forma Invoice (including all accessories)
3. This schedule needs to be filled by the Purchaser only If post warranty maintenance is specified as required in the BDS.

# Section VII.

## Contract Data

The following Contract Data shall supplement and / or amend the Conditions of Contract (CC). Whenever there is a conflict, the provisions herein shall prevail over those in the CC.

CC 1.1(i)	The Purchaser is: <b>General Hospital (Teaching), Peradeniya</b>
CC 1.1 (m)	Final Destination is: <b>General Hospital (Teaching), Peradeniya</b>
CC 8.1	For <b>notices</b> , the Purchaser's address shall be: Attention: <b>Director</b> Address: <b>General Hospital (Teaching), Peradeniya.</b> Telephone: <b>081 – 2388001/0812388016</b> Fax: <b>081 - 2388371</b> E mail:
CC12.1	Details of Shipping and other Documents to be furnished by the Supplier: <b>1.Tax Invoice</b> <b>2.Manufactrue Certificate</b>
CC 15.1	<b>Method &amp; Conditions of Payment to be made to the Supplier under this Contract shall be as follows:</b>  Payment shall be made in Sri Lankan Rupees within thirty (30) days of presentation of claim supported by a certificate from the Purchaser/End user declaring that the Goods have been delivered and that all other contracted Services have been performed.  <b>I. On Delivery:</b> Hundred (100) percent of the contract price shall be paid on verification of the goods delivered to the Stores of the TH Peradeniya against the purchase Order and upon submission of the documents specified in CC Clause 12  <b>II. Liquidated Damages</b>



	<p>a. In the event of the supplier unable to supply the goods during the agreed period, the supplier shall be liable to pay a sum equivalent to the 1% of total contract value for each week and maximum of 10% shall be charged for 10 weeks beyond the agreed period as liquidate damages.</p> <p>b. The performance bond shall be forfeited and the supplier shall be black listed if the supplier is unable to supply the goods after 10 weeks beyond the agreed period</p>
<b>CC 17.1</b>	A Performance Security shall be required. <b>ten percent (10%) of the contract value</b>
<b>CC 27.3</b>	<p><b>Warranty</b></p> <p>The warranty shall remain valid for ONE years after the Goods, or any portion thereof as the case may be, have been delivered to and accepted at the final destination indicated in the Contract data.</p>

## Document Check List

*(This document must be returned with the bid.)*

Bids shall be accompanied by following documents duly filled and signed by bidders as per the given order.

Please tick the appropriate cage, if enclosed, and give the relevant page number in Your bid document.

No.	Document	Enclosed	No.
1	Bid Submission Form (Including all related Cost, i.e. Post warranty service charges, civil construction work, etc.)		
2	Bid Security		
3	Power of Attorney to the signatory		
4	Price Schedule – Goods		
5	Delivery Schedule - Goods		
6	Price Schedule –Maintenance (if applicable)		
7	Cost of major replacement components, mandatory spare parts, consumables, accessories etc. Valid for 3 yrs. From the expiry of warranty		
8	Manufacturer's Authorization letter		
9	Bidder's response to technical specifications		
10	Detailed Pro forma invoice		
11	Relevant catalogues, technical literature, product data sheets etc.		
12	Post Qualification data		
	a) Financial Reports		
	b) Work shop & of Test equipment details		
	c) Technical staff details		
	d)		
14			
15	Copy of Business Registration Certificate		
16	Certificate of Registration as an agent of behalf of the tender ( PCA 3 form)		
17	Insurance Certificate from port of disembarkation to handing over (if required in BDS)		
18	Warranty Certificate of Manufacture		
19	Declaration from the Manufacture that the goods supplied under this procurement will be brand new		
20	A plan of the installation room, certified by the hospital Director, if applicable.		
21	A written consent that that the conditions of Services & Maintenance agreement shall not be changed and shall not request to change, after the pre agreed price of 05 years, if the agreement should be extended beyond the original 05 years period.		

.....  
Bidder's Name, Signature, Date & Company seal

### Technical Specifications for Server and Accessories

Minimum Technical Specifications for Server		Bidder Response (Yes / No)	If "No" comment/s on the offer
1	<b>Make Should be a world reorganized Brand</b>		
2	<b>Model</b>		
3	<b>Country of Origin</b>		
4	<b>Country of Manufacture</b>		
5	<b>Should be Energy star qualified model</b>		
6	<b>Manufacture Authorization &amp; ISO Certification must be attached</b>		
	<b>Warranty, Support and Spare Parts Availability</b>		
7	Manufacturer's comprehensive warranty for 7 years NBD (Next Business Day) Onsite Service for all components of the system (Proof document should attached for Manufacture onsite warranty)		
	All defective parts should be replaced free of charge with the brand-new parts during the warranty period from manufacturer's authorized technical team (Technical staff details should be attached)		
	Original Equipment Manufacturer should maintain all required spare parts in an Independent Part Depot		
	Should have access to 24x7-basis manufacturer's Customer Service		
	The bidder should have 3 years' experience in selling the quoted brand in Sri Lanka.		
8	<b>Form-Factor should be 2U with Rack Railing kits</b>		
	<b>System Configuration</b>		
9	CPU type	Intel® Xeon® Gold 5416S 2G, 16C/32T, 16GT/s, 30M Cache, Turbo, HT (150W) DDR5-4400	
10	CPU Cores Per Processor	At least 16 Cores 32 Threads	
11	Per CPU L3 Cache Memory	At least 30M Cache	
12	Required CPU Count	Two	

13	Main Memory	Should be minimum of 256 GB 3200MT/s Dual Rank DDR4 RDIMM,		
		should be available 16 DIMMs scalable up to at least 1 TB DDR4 3200MT/s		
14	Storage capacity	Should be available 12 x 4TB Hard Drive SAS ISE 12Gbps 7.2K 512n 3.5in Hot-Plug, AG Drive Additional 2 x 960GB SSD Drives		
15	Storage Controller & Features	Should consist of a SAS 12G type or higher Modular Controller with 8GB non-volatile cache memory		
		12 Eight-port internal SATA+SAS solution supporting 3Gbps, 6Gbps and 12Gbps SAS/SATA hard disk drives (HDDs) and solid-state drives (SSDs)		
		Up to 12Gbps per port data transfer rate		
		Should support the automatic rebuilding of the spare drive		
		Should facilitate pre-alerts for impending hard drive failures		
		Global and dedicated hot spare with revertible hot-spare support: automatic rebuild		
16	RAID Level supported	RAID 0, 1, 5,10,50 and 60		
17	Network Interfaces	Quad -Port 1GbE On-Board Network ports. Dual Port 10/25GbE SFP28 Adapter with transceivers.		
18	Remote Management	Should consist of a dedicated network interface for remote management		
		Detect an invalid, untrusted BIOS image when a boot is attempted and recover to an authenticated, trusted BIOS image		
		Should be cable of performance monitoring & hardware management, BIOS & OS access through a Virtual Console (Up to 6 users), providing both inbound and out of band remote management of the Server		

		Redfish SSE Support		
		Automatic Secure recovery of OS, as well as BIOS and BMC		
		Agentless monitoring and configuration		
		Allow for automatic installation and configuration and renewal of SSL Certification		
		Dynamic enabled USB ports		
		Server System Lockdown Mode		
19	USB Ports	At least 3x USB 2.0/3.0 type ports should be available		
20	PCI Slots	Six or more		
21	Internal Optical Drives	1x DVD +/-RW, SATA external		
22	Hardware Redundancy	Should consist of a redundant power supply system with each supply rated for 1400W and operating on 220-240V/50Hz		
	Operating System Compatibility			
23	Should support common Server grade operating systems and all related drivers should be available. A complete operating system supportability matrix should be provided with the bid submission			
	Virtualization Support			
24	Should be compatible with all major commercial grade virtualization platforms. A complete virtualization system compatibility matrix should be provided with the bid submission			
	Bill of Material			
25	Complete Bill of Materiel with all relevant part numbers should be provided together with the bid submission			
	System Management			
26	Should be able to download and update the firmware without active warranty or post warranty service contract.			
27	Warranty status for all managed servers should be reported in all consoles			
28	Should be able to auto update enables direct firmware update from repositories			
29	To maintain an up to date firmware repository and update managed servers, repository manager should provide proactive notification,			

<b>Layer 2 switch: 24G PoE Switch</b>				
	<i>Requirement</i>		<i>Conform (Yes / No)</i>	<i>Remarks</i>
1	Make	Please Specify		
2	Model	Please Specify		
3	Country of Origin	Please Specify		
4	Country of Manufacture	Please Specify		
5	Form Factor	1U Rack Mountable		
6	Management	Fully Manageable		
7	Ports			
8	LAN Ports	24 x Auto-negotiating 10/100/1000 BASE-T PoE ports		
9	SFP+ Ports	4 x SFP+ fixed 1/10G SFP+ fixed ports		
10	Console Port Type	1 x RJ45/USB-C/Micro USB (Please specify)		
	Memory and Processor			
11	Memory	4 GB or more		
12	Processor	Dual Core 1000 MHz or more		
13	Storage	8GB eMMC or more		
	Performance			
14	Switching Capacity	120 Gbps or more		
15	Throughput	92 Mbps or more		
16	Routing Table Size	Please specify		
17	MAC Address Table Size	Please Specify		
18	Packet Buffer Size	1MB or higher		
19	Supported VLANs	Up to 4094 VLANS		
20	PoE Power	Please specify		
	Latency			
21		1 Gbps Latency: <2 $\mu$ s		
22		10 Gbps Latency: <2 $\mu$ s		
	Management & Other			
23		Command-line interface		
24		Web browser		
25		Configuration menu		
26		LLDP and LLDP-MED must be supported		
	Configuration			
27	Configurations should be done according to the guidelines provided by the university			
28	Warranty			

<b>UPS – 2kVA</b>			
	<i>Requirement</i>	<i>Conform (Yes / No)</i>	<i>Remarks</i>
1	Output power rating of 2kVA		
2	Output voltage 220V/240V +-5%, Frequency 50Hz +-0.5Hz		
3	Input voltage range 180V-260V AC, 50Hz		
4	Line-interactive operation		
5	15 minute backup time at full load, and 45 minute backup time at 50% load		
6	Sealed type batteries		
7	Audible alarms to indicate battery operation		
8	RS-232 interface and matching cable for remote shutdown		

<b>CAT-6A 1G patch codes (2m)</b>			
	Minimum Technical Specifications	Confirm (Yes/No)	Remarks
1	Make: Please specify		
2	Model: Please specify		
3	Country of origin (Europe, USA or UK will be preferred)		
4	Country of manufacture: Please specify		
5	Manufacturer authorization		
6	25 Years for system performance warranty should be provided		
7	Warranty should provide a 05-year component warranty		
8	02 Certified installers / Engineers for quoted product, Certificates should be submit with the bid		
9	Manufacturer should be ISO 9001 certified		
10	Conductor: Bare copper wire 0.55mm (AWG23)		
11	Insulation material: HDPE		
12	Outer Jacket: LSZH		
13	Bandwidth of 500 MHz or higher		
14	The Cat.6A S/FTP cable shall have the diameter of the outer jacket not greater than 7.2 mm		
15	Performance conforms to EN50173-1, ISO/IEC 11801 and EIA/TIA-568C, Category 6A Specifications		
16	Fire safety standard: IEC 60332-1-2, EN 60332-1-2, VDE 0482-332-1-2		
17	Characteristic Impedance of Cat.6A S/FTP cable shall be 100Ω ±5Ω and the copperconductor shall be AWG 23		
18	The proposed CAT6A S/FTP cable shall be third party tested and the 3 <sup>rd</sup> party certification should be submitted with the bid		
19	The tender shall propose Cat.6A RJ-45 - RJ-45 patch cords that shall be fully matched with the relevant Cat.6A cable and Module to deliver the desired performance of 250 MHz to form Class E end-to-end cabling channel.		
20	RJ-45 - RJ-45 patch cords shall comply with applicable standards IEC 61156, TIA/EIA 568-C.2		
21	All patch cords proposed shall be factory terminated at both ends, field terminated patch cords will not be acceptable.		

<b>24 PORTS CAT-6A Patch Panel</b>			
	Minimum Technical Specifications	Confirm (Yes /No)	Remarks
1	Make: Please specify		
2	Model: Please specify		
3	Country of origin (Europe, USA or UK will be preferred)		
4	Country of manufacture: Please specify		
5	Manufacturer authorization		
6	25 Years for system performance warranty should be provided		
7	Warranty should provide a 05-year component warranty		
8	Manufacturer should be ISO 9001:2008; ISO 14001:2004; OHSAS 18001:2007 certified		
9	Proposed patch panel shall be metallic and front cover shall made of flame retardant compound which is UL94V-0 rated.		
10	Performance conforms to TIA/EIA -568 A/B, ISO/IEC 11801 & EN 50173-1 Category 6A Specifications		
11	Proposed patch panel shall be fitted with a cable strain relief for retention of incoming horizontal cable.		
12	Patch panels shall be modular, rack-mount, 19 inch and 1RU with capacity to house 24 Ports of Cat. 6A modular snap-in un-shielded keystone modules		
13	The patch panel shall provide a transparent plastic label-holder for easy individual port identification and label strips shall be easily replaceable.		
14	Patch panel shall come in Black similar to RAL 9005		

<b>SFP+ transceiver</b>			
	<b>Requirement</b>	<b>Conform (Yes / No)</b>	<b>Remarks</b>
1	Make & Model : Please specify		
2	1000/10000Base-LX (for single mode)		
3	LC interface		
4	Compatibility with above mentioned L2& existing core Switch (Aruba 5406)		
5	Warranty : One year comprehensive warranty		



<b>Single Mode Optical Fiber (Indoor)</b>			
	<b>Requirement</b>	<b>Conform (Yes / No)</b>	<b>Remarks</b>
1	9/125 μm water-blocked loose tube Single-mode fiber		
2	Polyethylene sheath and nylon jacket		
3	Attenuation: less than 1 dB/km (at 1310nm), less than 1 dB/km (at 1550nm)		
4	Bandwidth: At least 100GHz (1310nm), At least 100GHz (at 1550nm)		
5	Maximum Bending Radius: 200mm		
6	Number of cores mentioned in the BoQ		
7	Attenuation 1310nm ≤ 0.4 dB/km 1550nm ≤ 0.3 dB/km		
8	Chromatic Dispersion (ps/nm.km) 1310nm ≤ 3.6 1550nm ≤ 18 1625nm ≤ 22		
9	Tensile Loading (Testing method according to IEC 6794-1-E1, test method and acceptance criteria to be provided)		
10	Crush Resistance (Testing method according to IEC 6794-1-E3, test method and acceptance criteria to be provided)		
11	Impact testing (Testing method according to IEC 6794-1-E4, test method and acceptance criteria to be provided)		
12	Torsion (Testing method according to IEC 6794-1-E7, test method and acceptance criteria to be provided)		
13	Temperature Cycling (Testing method according to IEC 6794-1-F1, test method and acceptance criteria to be provided)		
14	Vender Should have minimum of 10 years' experience in selling the quoted brand in Sri Lanka		
15	Vender should have at least one certified vender for the quoted product by the manufacture (Should attach proof)		
16	Letter from the distributor agent stating the capability authorization for sale support of the quoted product		

<b>Fiber termination</b>			
	<b>Requirement</b>	<b>Conform (Yes / No)</b>	<b>Remarks</b>
1	Fibers must be directly terminated on to LC connectors		
2	Fusion splicing of factory-made LC pig-tails permitted only if fully automated fusion splicing equipment is used		
3	Pigtails : 9/125,0.9,SC,LSZH, Semi Tight Pre terminated compatible with LC snap in adapter plates		

<b>Fiber Optic Patch Panel</b>				
	<i>Requirement</i>		<i>Conform (Yes /No)</i>	<i>Remarks</i>
1	Fiber Management shelf	The fiber management shelf shall have compact design and be ideal for high density front patching applications.		
2		Should be fully loaded and factory fitted assembly with no assembling required during installation at site		
3		High Density: 1U: 6/12 Fiber terminations		
4		Should be factory fitted and tested with LC adapters, splice trays, LC SM Pigtails, sleeves and fiber management rings		
5		Compatible with all connector types		
6		Mounting brackets can be placed in different positions		
7	Drawer style shelf	Sliding type		
8		Easy access to splicing tray		
9		Easy access to back side of connector		
10	Accessories	Fiber management guides, radius controls & secure tie downs provided		
11		Sealed cable inlets for dust and rodent protection		
12		Others: Please specify		
13	Fiber input	2 No's minimum		
14	Housing Material	Min 16-gauge steel		
15	Surface	Powder coated		
16	Compliance	RoHS Compliant		

<b>LC to LC Patch Cord SM (2m)</b>				
	<i>Requirement</i>		<i>Confirm (Yes/No)</i>	<i>Remarks</i>
1	Make and Type	LC to LC Duplex Fiber Optic Patch Cords 9/125		
2	Cable Sheath	LSZH		
3	Cable Diameter	1.8 mm mini twin zip		
4	Ferrule	Ceramic		
5	Buffer	.6 mm		
6	Return Loss	> 45 db		
7	Insertion Loss	.1 db Typical Max .3 db		
8	ROHS	ROHS/ELV Compliant		
9	Length	Mentioned in the Boq		

<b>Cable Guide</b>			
	<i>Minimum Requirement</i>	<i>Compliance</i>	
		<i>Yes/No</i>	<i>Bidder's Response</i>
1	Make		
2	Model		
3	Country of Origin		
4	Country of Manufacture		
6	3 years component warranty should be provided		
7	48 port 2U rack mountable duct design with lid		
8	Mounting screws must include		

<b>Free standing network cabinet</b>			
	<b>Minimum Requirement</b>	<b>Compliance</b>	
		<b>Yes/No</b>	<b>Bidder's Response</b>
1	Make		
2	Model		
3	Country of Origin		
4	Country of Manufacture		
5	5 years component warranty should be provided		
6	42U, 19" rack with 600mm depth		
7	Thickness: mounting profile 2.0mm & others 1.2 -1.5mm		
8	finishing should be powder coated black/gray color		
9	should consist of key lockable front door with tempered glass		
10	should consist of two side panel opening with key locks		
11	Should have adjustable railing for front and rear		
12	Network cabinet should be from the same structured cabling manufacturer		
13	Should consist of 13A Square pin 6way Power distribution unit		
14	Should consist of two cable entry gourmets from top of the rack		
15	should consist of two number of exhaust fans in top plate		
16	Equipment rack should be grounded using proper earth wire 2.5mm (7029) or proper method.		
17	should consist of proper ventilation halls in addition to exhaust fans		
18	Should include sufficient M6 cage nut & screw for device mounting		
19	Should include cantilever shelf		

<b>Remarks</b>		<b>Bidder's Response (Yes/No)</b>
1	<b>The server and all necessary accessories shall be supplied and installed by the same supplier. Therefore, if the bidder cannot bid for all the items (Server, Accessories), should not bid for only one item or few</b>	
2	<b>It is mandatory to attend the Pre-Bid meeting before submitting the bids</b>	
3	<b>The bidder should inspect the relevant premises and get a prior understanding of the Job and quantities of accessories required Before submitting bids.</b>	
4	<b>Incomplete bids will be liable to reject during the evaluation phase</b>	
5	<b>In case of a malfunction of Accessory/part, the vendor shall attend to fix it within 06 hours of official notification of malfunction.</b>	